

THE PENDING CLAIMS

The claims pending in this Application are represented for the Examiner's convenience as follows:

Claims 1-3 (Canceled).

Claim 4 (Previously Presented): A method for the production of filler-containing paper, comprising:

depositing a pulp slurry consisting essentially of pulp fibre, a cationic polymer containing vinylamine units and a particulate filler (B) of titanium dioxide and/or calcium carbonate on a substrate; and

dewatering the applied pulp thereby fixing the cationic polymer and filler particles in to the fibers of the pulp such that the paper product prepared has an ash content of 3-40 wt %,

wherein the cationic polymer component is defined in terms of a component (A) which comprises at least 0.0005 %, but no more than 0.04 %, by conversion to solids concentration in terms of the dry mass of raw material pulp, of a polymer obtained by 20 to 100 % hydrolysis of the total formyl groups in a polymer having at least N-vinylformamide units as a polymerization component;

wherein component (A) and component (B) are added to the pulp slurry such that the mass ratio of component (A) to component (B) ranges from 0.001/100 to 0.5/100 by conversion to solids concentration; and

whereby the cationic polymer fixes the titanium dioxide and/or calcium carbonate filler particles to the fibers of the pulp and thereby enhances the ash content and opacity of the filler-containing paper produced relative to the ash content and opacity of the filler-containing paper produced without including the cationic polymer in the pulp slurry.

Claim 5 (Cancelled).

Claim 6 (Previously Presented): The method for the production of filler-containing paper according to Claim 4, wherein in the preparation of component (A), N-vinylformamide is copolymerized with a monomer selected from the group consisting of the vinyl or propenyl esters of saturated carboxylic acids, nonionic (meth)allyl monomers, (meth)allyl monomers having a side chain which contains a cationic nitrogen atom, olefins, ethylenically-unsaturated carboxylic acids, esters or amides of these ethylenically-unsaturated carboxylic acids, monomers with a nitrile group, monomers with a sulphonic acid group, monomers with a phosphoric acid group and styrene-type monomers.

Claim 7 (Previously Presented): The method for the production of filler-containing paper according to Claim 4, wherein said pulp is a kraft pulp, a sulphite pulp, other such bleached and unbleached chemical pulps, groundwood pulp, mechanical pulp, thermomechanical pulp, chemithermomechanical pulp, other such bleached or unbleached high-yield pulps, waste pulps, wood pulp, straw pulp, kenaf pulp and mixtures of one of said aforesaid pulps and a synthetic polyamide, polyester, polyolefin or polyvinyl alcohol fibre.

Claim 8 (Previously Presented): A base paper of the filler-containing paper produced according to the method of Claim 4 in the form of a construction material, India paper or tip base paper for cigarettes.

Claim 9 (Previously Presented): The method for the production of filler-containing paper, comprising:

depositing a pulp slurry consisting essentially of pulp fibre, a cationic polymer containing vinylamine units and a particulate filler (B) of titanium dioxide and/or calcium carbonate on a substrate; and

dewatering the applied pulp thereby fixing the cationic polymer and filler particles ~~in~~ to the fibers of the pulp such that the paper product prepared has an ash content of 3-40 wt %,

wherein the cationic polymer component is defined in terms of a component (A) which comprises at least 0.001 %, but no more than 0.04 %, by conversion to solids concentration in terms of the dry mass of raw material pulp, of a polymer obtained by 20 to 100 % hydrolysis of the total formyl groups in a polymer having at least N-vinylformamide units as a polymerization component;

wherein component (A) and component (B) are added to the pulp slurry such that the mass ratio of component (A) to component (B) ranges from 0.01/100 to 0.3/100 by conversion to solids concentration; and

whereby the cationic polymer fixes the titanium dioxide and/or calcium carbonate filler particles to the fibers of the pulp and thereby enhances the ash content and opacity of the filler-containing paper produced relative to the ash content and opacity of the filler-containing paper produced without including the cationic polymer in the pulp slurry.

Claim 10 (Previously Presented): The method for the production of filler-containing paper according to Claim 4, wherein particulate filler (B) is titanium dioxide.

Claim 11 (Previously Presented): The method for the production of filler-containing paper according to Claim 9, wherein particulate filler (B) is titanium dioxide.